PCT/JP2003/011921

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference W1202-00	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/JP2003/011921	International filing date (*day/month/year*) 18 September 2003 (18.09.2003)	Priority date (*day/month/year*) 20 September 2002 (20.09.2002)
International Patent Classification (IPC) or national classification and IPC D03D 15/12, D06M 13/513, B29B 11/16		
Applicant ASAHI-SCHWEBEL CO., LTD.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
14 November 2003 (14.11.2003)	13 October 2004 (13.10.2004)
Name and mailing address of the IPEA/JP Facsimile No.	Authorized officer Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/JP2003/011921

I. Basis of the report

1. With regard to the elements of the international application:*

☒ the international application as originally filed

☐ the description:

pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

☐ the claims:

pages _____, as originally filed
pages _____, as amended (together with any statement under Article 19
pages _____, filed with the demand
pages _____, filed with the letter of _____

☐ the drawings:

pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

☐ the sequence listing part of the description:

pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
These elements were available or furnished to this Authority in the following language _____ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

☐ the language of publication of the international application (under Rule 48.3(b)).

☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____
☐ the claims, Nos. _____
☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* *Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).*

** *Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.*

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/JP03/11921

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-5	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-5	NO
Industrial applicability (IA)	Claims	1-5	YES
	Claims		NO

2. Citations and explanations

Document 1: WO, 00-60153, A1, Example 4
Document 2: JP, 2002-242047, A, [0012]
Document 3: JP, 2002-38367, A, [0043]

Claims 1-5
Documents 1-3

Document 1 describes glass cloth of both warps and wefts of glass yarns each made of 200 fibers each having a diameter of 5 μm. The document also describes that material for warps and wefts for the glass cloth is opened by high-pressure water flow in a flattening process so that glass cloth having uniformly distributed glass fibers can be obtained (page 7, lines 15-17) and that a sheet of the said glass cloth is layered over the inner layer of a core plate when a printed circuit board is made with the said glass cloth (page 9, lines 18-23).

Documents 2 and 3 describe that, in a flattening process for glass cloth, opening material for glass cloth with as low a tension as possible by means of normally used ultrasonic waves, high-pressure water flow, etc., improves the opening result with larger thread widths and more uniformly distributed glass fibers in the cloth.

The invention for glass cloth described in document 1 also aims to open material for warps and wefts so that glass fibers can be uniformly distributed. So, a person skilled in the art could have easily adopted the idea of implementing the opening process with as low a tension as possible described in documents 2 and 3, in the opening process of document 1, wherein optimal conditions for such tension are set.

Considering even the examples and comparisons in the detailed description of the invention of the present application, it is not considered that the tension values defined in claim 2 of the present application have critical significance.

In view of the examples in the detailed description of the invention of the present application, normally used high-pressure scattered water flow is used as a means of opening material, and so in the opening process described in document 1, glass cloth obtained by opening at as low a tension as possible wherein the said tension is optimized would satisfy the thread width ratio and the elongation ratio described in claim 1 of the present application, as a consequence.